a first color. A coloring agent of a second color is added such that the resulting color of the shaving aid is a third color when the strip is new. The coloring agent gradually leaches from the strip due either to exposure to water, abrasion during usage, or a combination of both such that after a certain number of uses the color of the strip changes from the third color to the first color of the polymer or some intermediate color noticeably different to the consumer. Alternatively, the polymer may be colorless so that when the coloring agent leaches out the resulting strip is colorless.

A third embodiment of the present invention is a two-layer strip in which the upper layer contains water soluble or a combination of soluble and non-soluble shaving aid material of a first color, while the lower layer contains essentially non-water soluble material of a second color. Upon exposure to water during usage, the upper layer gradually deteriorates to the point where the second color of the lower layer becomes visible through the upper layer, thus indicating the need to change the razor head.

A further embodiment involves a three-layer strip, in which both of the outside layers are of an water soluble or a combination of soluble and non-soluble material of a first color and the center layer is of a non-water soluble material of a second color. Such a tri-layered strip would allow the strip to be attached to the razor cartridge during manufacture without concern for the orientation of the top and the bottom of the strip. A tri-layered strip would be particularly useful when the strip is manufactured by the process of extrusion.

A still further, and most preferred, embodiment comprises a shaving aid of a first color which is coated with a sectional portion of a second color. During shaving, the coated section wears away through solubility, abrasion, or a combination of the shavaid.wp

two, to indicate to the consumer that the cartridge should be replaced. The coating may consist of multiple layers, some of which layers may wear away during usage.

In a still further embodiment, different color water soluble and non-water soluble coloring agents are mixed so as to indicate a single color when the strip is new. The water soluble agent leaches from the strip upon exposure to water so that after a certain period of usage the strip changes color to that of the non-water soluble coloring agent.

Brief Description of the Drawings

FIGURE 1 is a perspective view of a razor head having a shaving aid in the form of a comfort strip.

FIGURE 2 is a micro-view of a shaving aid having aqueous and non-aqueous dye components.

FIGURE 3 is a cross-section view of a two-layer shaving aid.

FIGURE 4 is a cross-section view of a three-layer shaving aid.

FIGURE 5 is a perspective view of a shaving aid having a sectional portion coated with a material of a color different than that of the shaving aid.

Detailed Description

The embodiments of the present invention are designed to provide a disposable razor or a disposable razor system having a shaving aid mounted on the razor head. As used herein, the term "razor head" is meant to include disposable cartridges designed for separate attachment to a razor handle, as well as the operative portion of a razor wherein the cutting portion is integrally formed with the handle portion. According to the present invention, shaving aids are disclosed which provide a

sensory indication to the user that the razor head should be replaced.

Figure 1 illustrates a razor head 10 incorporating a shaving aid 11 in the form of a comfort strip. Although the shaving aid is illustrated as a comfort strip located on the cap of the razor head above the blade, the shaving aid may be of any shape and may be located in any skin-engaging position on the razor. It is also possible for a shaving aid that relies on solubility to be located in a non-skin engaging surface and be effective. Further, one skilled in the art will appreciate that the razor head may be of various configurations, i.e., the razor may contain one or more blades and the razor head and handle may be integrally formed as in a disposable razor system.

Figure 2 illustrates one embodiment of the shaving aid of the present invention. A water soluble coloring agent 20 of a first color and a non-water soluble coloring agent 21 of a second color are located in the shaving aid 11, along with thermoplastic material and a shaving aid material 22. Initially, when both coloring agents 20, 21 are present, the shaving aid 11 is a third color which is a combination of the colors of the two coloring agents. In a preferred embodiment, the solubility of the water soluble coloring agent is in accordance with the solubility of the shaving aid material so that the water soluble coloring agent leaches from the shaving aid at a similar rate due to exposure to water during usage as that of the shaving aid material.

During shaving, the shaving aid comes into contact with water and the water soluble coloring agent 20, along with the shaving aid material 22, leaches from the shaving aid 11. As the water soluble coloring agent 20 leaches from the shaving aid, the color of the shaving aid changes from the third color to the second color, i.e., the color of the non-water soluble coloring agent 21. When the shaving aid changes to the second color the shavaid.wp